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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,540	02/08/2002	Attilio Rimoldi	005826.P001	9878

8791 7590 04/19/2004

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EXAMINER
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CABRERA, ZOILA E

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 04/19/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/071,540

Applicant(s)

RIMOLDI ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejection under 102 regarding claims 1-27 is maintained.

### ***Claim Rejections - 35 USC § 102***

2. Claims 1-21 and 22-27 are rejected under 35 U.S.C. 102(e) as being anticipated by **Schell et al. (US 6,628,279)**.

With respect to claims 1-10, **Schell** discloses a method comprising:

- receiving a user selection of a current design feature from a plurality of available design features (Fig. 8C, i.e., Select Tool; Fig. 10C, i.e. Create Component, pick origin, Paint: none or solid or pattern);

identifying a plurality of behavioral parameters specific to the current design feature selected by a user (Fig. 12, steps 1208, 1210; Fig. 13, steps 1306, 1308; Fig. 10C, i.e., Behavior elements 1030 align Red/Green plane, 1028 to any faces, 1026 cut opening, and 1032 are specific to the current design feature selected by user wherein the design feature is a dormer);

Presenting the plurality of behavioral parameters to the user (Fig. 10C, Behavior, elements 1030, 1028, 1026; Fig. 23B, element 2310);

receiving user input identifying one or more behavioral parameters selected from the plurality of behavioral parameters by the user (Col. 6, lines 9-14; Figs. 10C and 23B); and modeling the current design feature by calculating a geometry of

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the current design feature based on the one or more behavioral parameters selected by the user and context defined by other design features of an object having the current design feature (Col. 5, lines 12-14; Col. 6, lines 2-5; Fig. 23C; Col. 17, lines 56-63, i.e., "because the dormer component was defined as having the behavioral property of sticking to any plane, the dormer instance 1030 automatically orients itself with the plane of the roof 1040 when the cursor is positioned over the roof 1040". Please note that a calculating geometry is taking place when the dormer instance 1030 automatically orients itself with the plane of the roof 1040.);

- the one or more behavioral parameters reflect functionality intended by the user for the current design feature (Col. 5, lines 12-26; Col. 6, lines 1-5 and lines 8-13);
- receiving a user request to modify a geometric parameter of the modeled design feature (Col. 5, lines 39-48; Col. 5, lines 22-26); and modifying the geometry of the modeled design feature while maintaining the intended functionality of the modeled design feature as identified by the one or more behavioral parameters of the modeled design feature and relationships of the modeled design feature with the other design features of the object (Col. 16, lines 47-56; Col. 16, lines 59-67 – Col. 17, lines 1-4);
- receiving one or more geometric parameters pertaining to the current design feature from the user (Figs. 6P - 11);

- displaying a user interface facilitating selection of the one or more behavioral parameters by the user (Figs. 10C, elements 1030, 1028, 1026 and 23B, Behavior);
- displaying the modeled design feature on a screen (Figs. 10D and 23C);
- defining a plurality of behavioral parameters for each of a plurality of design features using a set of rules associated with a corresponding application (Col. 17, lines 56-63; Col. 18, lines 51-60);
- the geometry of the current design feature is calculated based on relationships of the current design feature with a geometry of the other design features of the object (Col. 17, lines 56-63);
- determining relationships between the current design feature and the other design features of the object based on the one or more behavioral parameters (Col. 17, lines 56-63);
- receiving a user request to modify any one of a geometric and behavioral parameter of one of the other design features; modifying said one of the other design features; and adjusting the modeled design feature to maintain functionality defined by the one or more behavioral parameters (Col. 18, lines 61-65; Col. 25, lines 60-67 – Col. 26, lines 1-10).

Regarding claims 11-21, the same limitations applied to claims 1-10 apply as well for claims 11-21.

As for new claims 22-24 and 25-27, **Schell** further discloses,

- maintaining the functionality intended by the user for the current design feature during a design process of the object (Col. 5, lines 12-26; Col. 6, lines 1-5 and lines 8-13);
- displaying to the user a plurality of characteristics of the current design feature selected by the user and a set of functional options for each of the plurality of characteristics, wherein each of the plurality of behavioral parameters contains one of the plurality of characteristics and one functional option from a list of functional options available for said one of the plurality of characteristics (Figs. 10C and Fig. 23B; please note that for each component a corresponding Create Component window is displayed with its corresponding Behavior options and functions);
- allowing the user to select one functional option from a list of functional options for each of the plurality of characteristics (Fig. 10C, elements 1032; 1034).

### ***Response to Arguments***

3. Applicant's arguments filed April 1, 2004 have been fully considered but they are not persuasive. Claims 1-27 are so broad as to read in Schell. Applicant contends that Schell does not provide a set of available design features from which the user can select a desired feature. Examiner disagrees because as shown in (Fig. 10C, i.e., Behavior elements 1030 align Red/Green plane, 1028 to any faces, 1026 cut opening, and 1032 are specific to the current design feature selected by user wherein the design feature is a dormer). Applicant further contends that Schell does not teach or suggest

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that the geometry of the design feature is calculated based on behavioral parameters and the context defined by other design features of an object. Examiner disagrees because Schell discloses such limitations in (Col. 17, lines 56-63, i.e., "because the dormer component was defined as having the behavioral property of sticking to any plane, the dormer instance 1030 automatically orients itself with the plane of the roof 1040 when the cursor is positioned over the roof 1040". Please note that a calculating geometry is taking place when the dormer instance 1030 **automatically** orients itself with the plane of the roof 1040.).

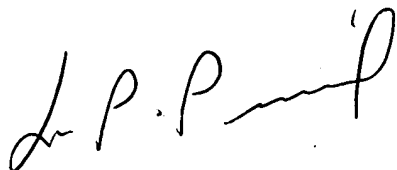
#### **Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera  
Patent Examiner  
4/15/04



LEO PICARD  
SUPERVISORY PATENT EXAMINER  
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